

#### SCHEME OF EXAMINATION AS PER AICTE MODEL CURRICULAM W.E.F JULY-2020

# **Department of Electrical Engineering (EE)**

### First Semester-Master of Technology

### Specilazation in Power Electronics & Drives Marks & Credits Distribution of Subjects

|       | Subject<br>Code    | Core/          | Name of Subject                                     |            | Theory S             | lot  | Practical                             |              |                | Credits A | lloted Sub    | ject wise |    |  |  |
|-------|--------------------|----------------|---|------------|----------------------|--|---------------------------------------|--------------|----------------|-----------|---------------|-----------|----|--|--|
|       |                    |                |   | END        | MID Sem<br>Test (Two | Quiz &<br>Assignm-                                       | END<br>sem                            | Term<br>Work | Total<br>Marks | Lectu     | Total Credits |           |    |  |  |
|       |                    |                |   | sem        | Test Avg.)           | ents   |                                       |              |                | L         | T             | P         |    |  |  |
| 1     | MTPE11             | Core1          | Electric Drives System                              | 100        | 30                   | 30   |                                       |              | 160            | 3         | 1             | 0         | 4  |  |  |
| 2     | MTPE12             | Core2          | Modeling and Analysis of<br>Electrical Machines     | 100        | 30                   | 30   |                                       |              | 160            | 3         | 1             | 0         | 4  |  |  |
| 3     | MTPE13             | PE1            | Elective-I  | 100        | 30                   | 30   |                                       |              | 160            | 3         | 1             | 0         | 4  |  |  |
| 4     | MTPE14             | PE2            | Elective-II   | 100        | 30                   | 30   |                                       |              | 160            | 3         | 1             | 0         | 4  |  |  |
| 5     | MTPE15             | Core3          | Research Methodology and IPR                        | 100        | 30                   | 30   |                                       |              | 160            | 3         | 1             | 0         | 4  |  |  |
| 6     | MTPE16             | Lab1           | Electrical Drives Laboratory                        |            |                      |  | 50                                    | 50           | 100            | 0         | 0             | 4         | 2  |  |  |
| 7     | MTPE17             | Lab2           | Electrical Machines<br>Laboratory/Power Quality lab |            |                      |  | 50                                    | 50           | 100            | 0         | 0             | 4         | 2  |  |  |
| 8     | MTPE18             | Audit-I        | Audit I   |            |                      |  |                                       |              |                | 2         |               |           |    |  |  |
|       |                    |                | TOTAL   | 500        | 150                  | 150  | 100                                   | 100          | 1000           | 17        | 5             | 8         | 24 |  |  |
| -     | GRAND TOTAL : 1000 |                |   |            |                      |  | L : Lecture T: Tutorial P : Practical |              |                |           |               |           |    |  |  |
|       |                    |                | NOTE: Mid   | Semester T | ests (MST) T         | aken at Leas   | t twice Pe                            | er Semeste   | r              |           |               |           |    |  |  |
|       | Elective-I         |                |   |            |                      |  | Elective-II                           |              |                |           |               |           |    |  |  |
|       | .3 (A) Power O     | -              |   |            |                      | MTPE14 (A) Static VAR Controllers and Harmonic Filtering |                                       |              |                |           |               |           |    |  |  |
|       | ` '                |                | ctronic Circuits                                    |            |                      | MTPE14 (B)   |                                       |              |                |           |               |           |    |  |  |
| MTPE1 | .3 (C) Dynamic     | s of Electrica | l Machines  |            |                      | MTPE14 (C) Power Semiconductor Devices & Modeling        |                                       |              |                |           |               |           |    |  |  |

Audit I

MTPE18(A) English for Research Paper Writing, MTPE18(B) Disaster Management, MTPE18(C) Value Education



#### SCHEME OF EXAMINATION AS PER AICTE MODEL CURRICULAM W.E.F. JULY-2020

# Department of Electrical Engineering (EE)

## **Second Semester-Master of Technology**

# **Specilazation in Power Electronics & Drives Marks & Credits Distribution of Subjects**

|       | 1              |                   | ı                              | 1          |               | · .  |            |            |          | I ~                          |                  |   | 1        |  |  |
|-------|----------------|-------------------|--------------------------------|------------|---------------|--|------------|------------|----------|------------------------------|------------------|---|----------|--|--|
|       |                | Core/<br>Elective |                                |            | Theory S      |  | Pr         | actical    |          | Credits Alloted Subject wise |                  |   |          |  |  |
|       | Subject        |                   | Name of Subject                |            | MID Sem       | Quiz &   |            | Term       | Total    |                              | Total<br>Credits |   |          |  |  |
|       | Code           |                   | Name of Subject                |            | Test (Two     | Assignm-   |            | Work       | Marks    | Lectu                        |                  |   |          |  |  |
|       |                |                   |                                |            | Test Avg.)    | ents   |            | WOIK       |          | L                            | T                | P | <u>l</u> |  |  |
| 1     | MTPE21         | Core3             | Power Electronic Converters    | 100        | 30            | 30   |            |            | 160      | 4                            | 1                | 0 | 5        |  |  |
| 2     | MTPE22         | Core4             | Digital Control of Power       | 100        | 30            | 30   |            |            | 160      | 4                            | 1                | 0 | 5        |  |  |
|       |                |                   | Electronic and Drive Systems   |            |               |  |            |            |          |                              |                  |   |          |  |  |
| 3     | MTPE23         | PE3               | Elective-III                   | 100        | 30            | 30   |            |            | 160      | 4                            | 1                | 0 | 5        |  |  |
| 4     | MTPE24         | PE4               | Elective-IV                    | 100        | 30            | 30   |            |            | 160      | 4                            | 1                | 0 | 5        |  |  |
| 5     | MTPE25         | Core5             | Minior Project with Seminar    |            |               |  | 100        | 60         | 160      | -                            | 0                | 4 | 2        |  |  |
| 6     | MTPE26         | Lab3              | Power Electronics Laboratory   |            |               |  | 50         | 50         | 100      | 0                            | 0                | 2 | 1        |  |  |
| 7     | MTPE27         | Lab4              | Micro-controller Lab           |            |               |  | 50         | 50         | 100      | 0                            | 0                | 2 | 1        |  |  |
| 8     | MTPE28         | Audit II          | Audit II                       |            |               |  |            |            |          | 2                            | 0                | 0 | 0        |  |  |
|       |                | 7                 | OTAL                           | 400        | 120           | 120  | 200        | 160        | 1000     | 18                           | 4                | 8 | 24       |  |  |
|       |                | GRA               | AND TOTAL: 1000                | -          |               | L : Lecture T: Tutorial P : Practical            |            |            |          |                              |                  |   |          |  |  |
|       |                |                   | NOTE: Mid So                   | emester To | ests (MST) T  | aken at Leas                                     | t twice Pe | er Semeste | er       |                              |                  |   |          |  |  |
|       |                |                   | Elective-III                   |            |               | Elective-IV                                      |            |            |          |                              |                  |   |          |  |  |
| MTPE2 | 3 (A) Industri | al Load Mod       | deling and Control             |            |               | MTPE24 (A) Smart Grids                           |            |            |          |                              |                  |   |          |  |  |
| MTPE2 | 3 (B) Switche  | d Mode and        | Resonant Converters            |            |               | MTPE24 (B)Advanced Microcontroller based Systems |            |            |          |                              |                  |   |          |  |  |
| MTPE2 | 3 (C) Advance  | ed Digital Sig    | gnal Processing                |            |               | MTPE24 (C) Distributed Generation                |            |            |          |                              |                  |   |          |  |  |
|       |                |                   |                                |            | Audit         | : II   |            |            |          |                              |                  |   |          |  |  |
|       |                |                   | MTPE28(A) Constitution of Indi | a, MTPE28  | 3(B) Stress M | anagement b                                      | v Yoga, N  | TPE28(C)   | Pedagogy | Studies                      |                  |   |          |  |  |

SCHEME OF EXAMINATION AS PER AICTE MODEL CURRICULAM W.E.F JULY-2020

# Department of Electrical Engineering (EE) Third Semester-Master of Technology Specilazation in Power Electronics & Drives Marks & Credits Distribution of Subjects

|            |   | Core/<br>Elective                                  | Name of<br>Subject   |     | Theory SI               | ot   | Pra                          | actical Slot |                | Credits Alloted   |   |     |    | Total    |  |
|------------|---|--|----------------------|-----|-------------------------|--|------------------------------|--------------|----------------|-------------------|---|-----|----|----------|--|
|            |   |  |                      | END | MID Sem                 | Quiz &   | END                          | Term<br>Work |                | Subject wise      |   |     |    | Credit   |  |
|            | Subject<br>Code                           |  |                      | sem | Test (Two<br>Test Avg.) | Assignm-<br>ents                                       | sem                          |              | Total<br>Marks | Lectures per week |   | eek | -  | <u> </u> |  |
|            |   |  |                      |     |                         |  |                              |              |                | L                 | т | P   |    |          |  |
| 1          | MTPE31                                    | PE5  | Elective-V           | 100 | 30                      | 30   | 0                            | 0            | 160            | 4                 | 1 | 0   | 5  | 5        |  |
| 2          | MTPE32                                    | OE   | Open Elective-VI     | 100 | 30                      | 30   | 0                            | 0            | 160            | 4                 | 1 | 0   | 5  | 5        |  |
| 3          | MTPE33                                    | Major  | Phase-I Dissertation |     |                         |  | 400                          | 280          | 680            | 0                 | 0 | 20  | 10 | 10       |  |
|            | •   | TOTA   | AL .                 | 200 | 60                      | 60   | 400                          | 280          | 1000           | 8                 | 2 | 20  | 20 | 20       |  |
|            |   |  |                      |     |                         |  |                              |              |                |                   |   |     |    |          |  |
|            | GRAND TOTAL : 1000 MARKS                  |  |                      |     |                         | L : Lecture T: Tutorial P : Pi                         |                              |              |                | ractical          |   |     |    |          |  |
| Elective-V |   |  |                      |     | Open Elective-VI        |  |                              |              |                |                   |   |     |    |          |  |
| MTPE       | MTPE31 (A) SCADA Systems and Applications |  |                      |     |                         |  | MTPE32 (A) Industrial Safety |              |                |                   |   |     |    |          |  |
| MTP        | E 31(B) Fac                               | cts and cus  | stom power devices   |     |                         | MTPE32 (B). Business Analytics, 2. Operations Research |                              |              |                |                   |   |     |    |          |  |
| MTPE       | 31 (C) HVDC                               | MTPE32 (C) Cost Management of Engineering Projects |                      |     |                         |  |                              |              |                |                   |   |     |    |          |  |

SCHEME OF EXAMINATION AS PER AICTE MODEL CURRICULAM W.E.F JULY-2020

# Department of Electrical Engineering (EE) Fourth Semester-Master of Technology Specilazation in Power Electronics & Drives Marks & Credits Distribution of Subjects

|   |                          |          |                       | Theory Slot |            |          | Pra         | ctical Slot | Cred  |                                   | redits Alloted |          | Credit | Total  |
|---|--------------------------|----------|-----------------------|-------------|------------|----------|-------------|-------------|-------|-----------------------------------|----------------|----------|--------|--------|
|   | Subject                  | Core/    | Name of               | END         | MID Sem    | Quiz &   | END         | Term        | Total | Subject wise<br>Lectures per week |                |          |        | Credit |
|   | Code                     | Elective | Subject               | sem         | Test (Two  | Assignm- | sem         | Work        | Marks |                                   |                |          |        |        |
|   |                          |          |                       |             | Test Avg.) | ents     |             | WOIK        |       | L                                 | Т              | P        |        |        |
| 1 | MTPE41                   | Major    | Phase-II Dissertation |             |            |          | 500         | 500         | 1000  |                                   |                | 30       | 15     | 15     |
|   |                          | Project  |                       |             |            |          |             |             |       |                                   |                |          |        |        |
|   |                          | TOTA     | L                     |             |            |          | 500         | 500         | 1000  |                                   |                | 30       | 15     | 15     |
|   |                          |          |                       |             |            |          |             |             |       |                                   |                |          |        |        |
|   | GRAND TOTAL : 1000 MARKS |          |                       |             |            |          | L : Lecture |             |       | T: Tutorial P: Practical          |                | ractical |        |        |